AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for producing acetic acid, comprising the steps of:

continuously reacting methanol with carbon monoxide in the presence of a homogeneous rhodium catalyst, an iodide salt, methyl iodide, methyl acetate, and water; and

thereby producing acetic acid at a production rate of 11 mol/L·hr or more while keeping the acetaldehyde content of a reaction mixture to 500 ppm or less,

wherein the reaction is carried out at a carbon monoxide partial pressure in a gaseous phase of a reactor of 1.05 MPa or more and at a methyl acetate content of the reaction mixture of 2 to 10 percent by weight ~~or more~~ and at water content of the reaction mixture of 3 percent by weight or more and at a hydrogen partial pressure in the gaseous phase of the reactor of 70 kPa or less to thereby keep the production rate of acetaldehyde to 1/1500 or less of the production rate of acetic acid.

2. (Original) The method according to Claim 1, wherein the reaction is carried out at a hydrogen partial pressure in the gaseous phase of the reactor of 100 kPa or less.

3. (Canceled)

4. (Original) The method according to Claim 1, wherein the reaction is carried out at a hydrogen partial pressure in the gaseous phase of the reactor of 70 kPa or less and a methyl acetate content of the reaction mixture of 3.1 percent by weight or more.

5. (Canceled)

6. (Previously Presented) The method according to Claim 1, wherein acetic acid is produced at a production rate of 15 mol/L·hr or more.

7. (Previously Presented) The method according to Claim 1, wherein the production rate of acetaldehyde is kept to 1/2500 or less of the production rate of acetic acid.

8. (Previously Presented) The method according to Claim 1, further comprising a purification process which comprises the steps of:

separating the reaction mixture into acetic acid and a process mixture comprising residual components and recovering acetic acid;

separating and removing carbonyl impurities from the process mixture to give a residual process mixture; and

recycling the residual process mixture to the reactor.

9. (Previously Presented) The method according to Claim 1, further comprising a purification process which comprises the steps of:

(A) separating the reaction mixture into a volatile component and a low-volatile component by distillation, the volatile component comprising acetic acid, water, methyl acetate, and methyl iodide, and the low-volatile component comprising the rhodium catalyst and the iodide salt;

(B) separating the volatile component into a high-boiling component and a low-boiling component by distillation, the high-boiling component comprising acetic acid, and the low-boiling component comprising water, methyl acetate, and methyl iodide;

(C) recycling the low-volatile component to the reactor;

(D) separating and removing carbonyl impurities from the low-boiling component obtained in Step (B) to yield a residual component;

(E) recycling the residual component obtained in Step (D) to the reactor;

(F) separating acetic acid from the high-boiling component obtained in Step (B) by distillation; and

(G) treating the acetic acid obtained in Step (F) with a silver- or mercury-exchanged cation exchange resin.

10. (Original) The method according to Claim 9, wherein Steps (B), (D), and (F) are carried out using a total of three or less distillation columns.

11. (Canceled)

12. (Currently Amended) A method for producing acetic acid, comprising the steps of:

continuously reacting methanol with carbon monoxide in the presence of a rhodium catalyst which is a rhodium complex soluble in the reaction mixture under reaction conditions or can form the rhodium complex, an iodide salt, methyl iodide, methyl acetate, and water; and

thereby producing acetic acid at a production rate of 11 mol/L·hr or more while keeping the acetaldehyde content of a reaction mixture to 500 ppm or less,

wherein the reaction is carried out at a carbon monoxide partial pressure in a gaseous phase of a reactor of 1.05 MPa or more and at a methyl acetate content of the reaction mixture of 2 to 10 percent by weight ~~or more~~ and at water content of the reaction mixture of 3 percent by weight or more and at a hydrogen partial pressure in the gaseous phase of the reactor of 70 kPa or less to thereby keep the production rate of acetaldehyde to 1/1500 or less of the production rate of acetic acid.

13. (Canceled)